

FIG. 1
PRIOR ART

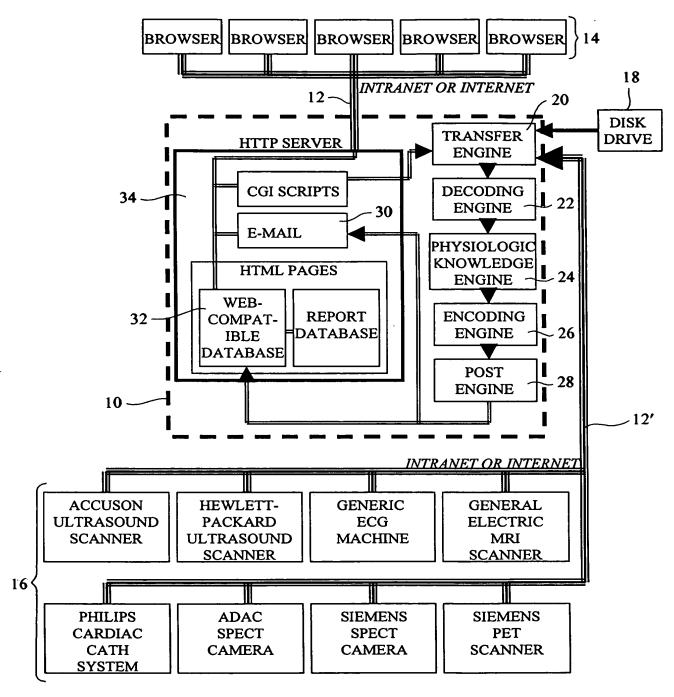


FIG. 2

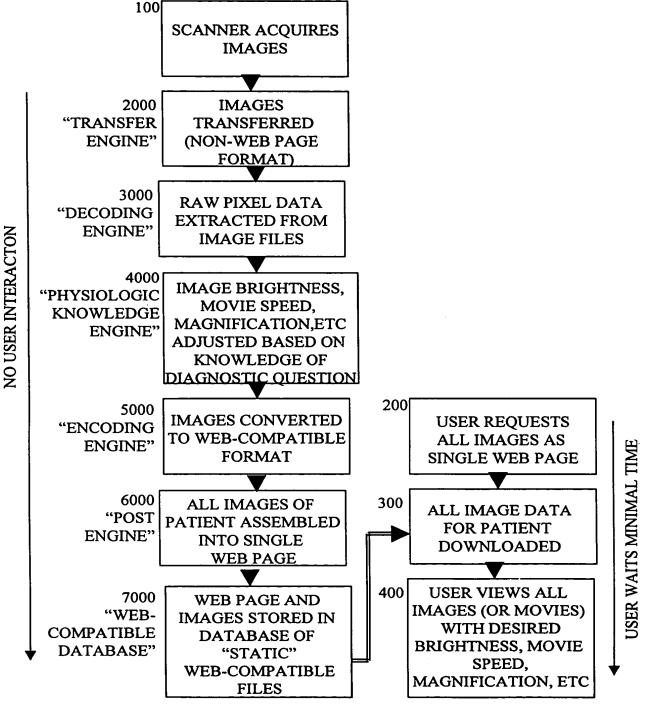
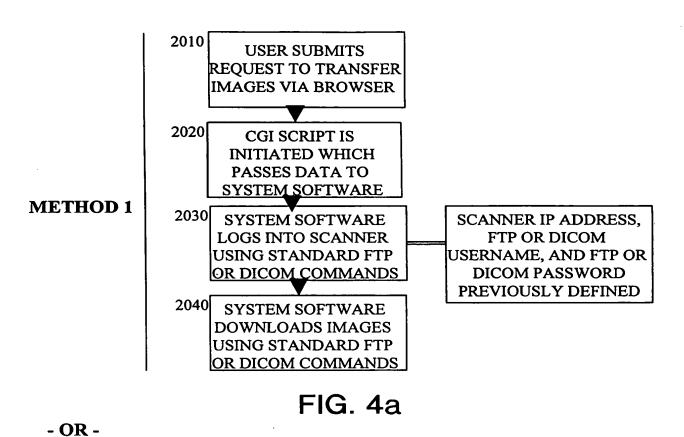


FIG. 3



METHOD 2

USER INSERTS
A DISK WITH IMAGES
(EG. A COMPACT
DISK)

SYSTEM SOFTWARE
COPIES IMAGES
TO HARD DISK

FIG. 4b

FIG. 5a

METHOD 1 FOR "STANDARD" IMAGE FORMATS (EG. DICOM) SYSTEM SOFTWARE
READS IMAGE
HEADERS TO DETERMINE
WHERE RAW PIXEL
DATA BEGIN

3020

3010

SYSTEM SOFTWARE READS IN RAW PIXEL DATA FOR ALL IMAGES

- OR -

METHOD 2 FOR "NON-STANDARD" IMAGE FORMATS 3011

SYSTEM SOFTWARE
USES A PRIORI KNOWLEDGE
OF IMAGE MATRIX OR
HEADER SIZE TO DETERMINE
WHERE RAW PIXEL
DATA BEGIN

3021

SYSTEM SOFTWARE READS IN RAW PIXEL DATA FOR ALL IMAGES

FIG. 5b



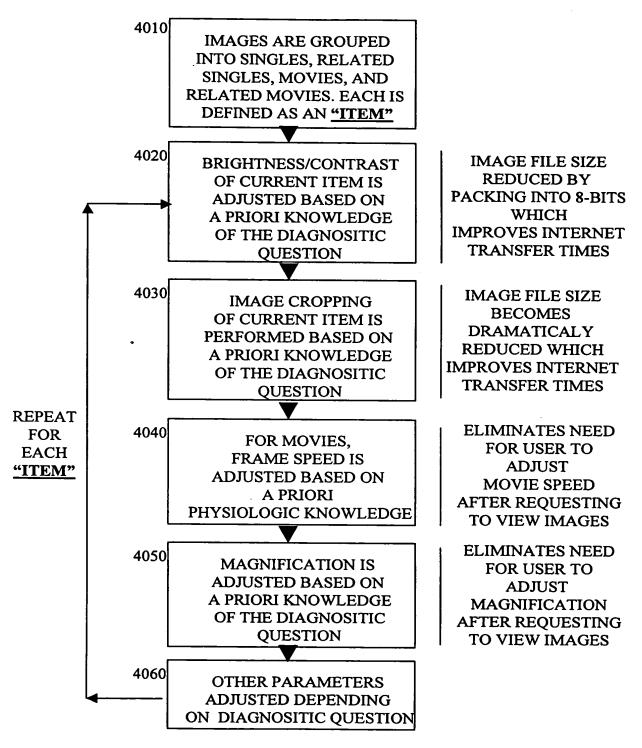


FIG. 6

STEP 4020 - Define search region as subregion within image which contains the organ of interest (eg. heart) and search all movie frames for the single brightest pixel. Scale all movie frames by same amount to make single brightest pixel equal to 2 to the 8th power minus 1, eg. 255 (1 byte/pixel, 8-bit image).

STEP 4030 - Create thumbnail movies by cropping images such that only the organ of interest is shown (eg. heart).

STEP 4040 - Convert all movie frames into a single movie with frame rate chosen to simulate real time motion (eg. beating heart).

STEP 4050 - Create a full-field-of-view version of each thumbnail so that user can double-click to view additional details.

FIG. 7a

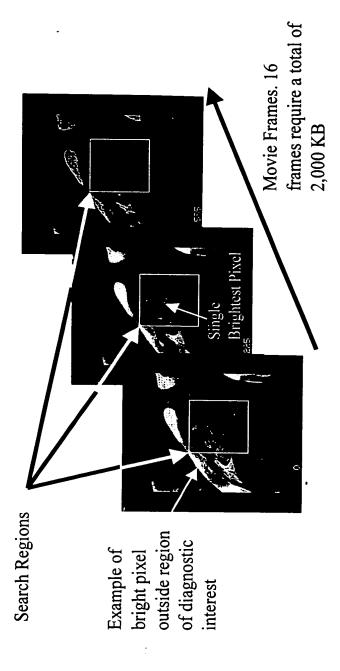


FIG. 7b

beating heart (16 frames=100KB) Eg. STEP 4040 Thumbnail movie of

Eg. STEP 4050 Full field-of-view movie displayed full screen when thumbnail clicked (16

frames=400KB)

FIG. 7c

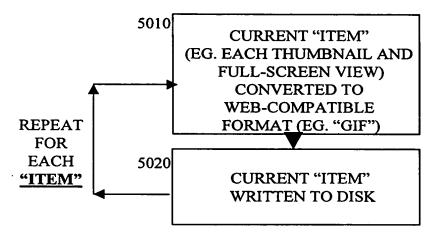


FIG. 8

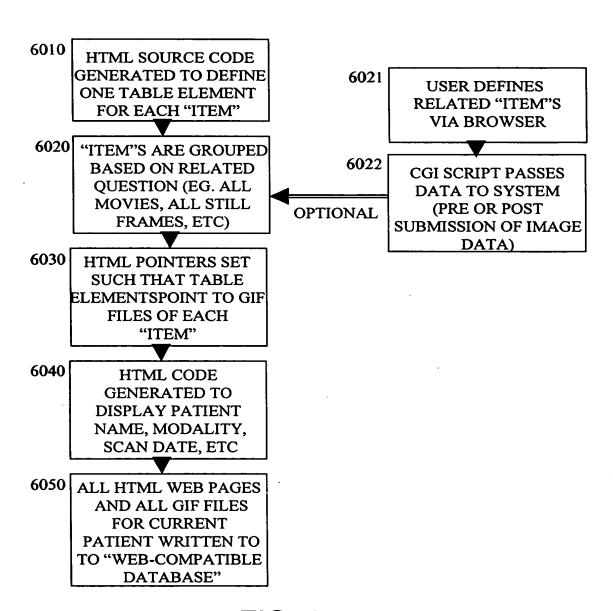
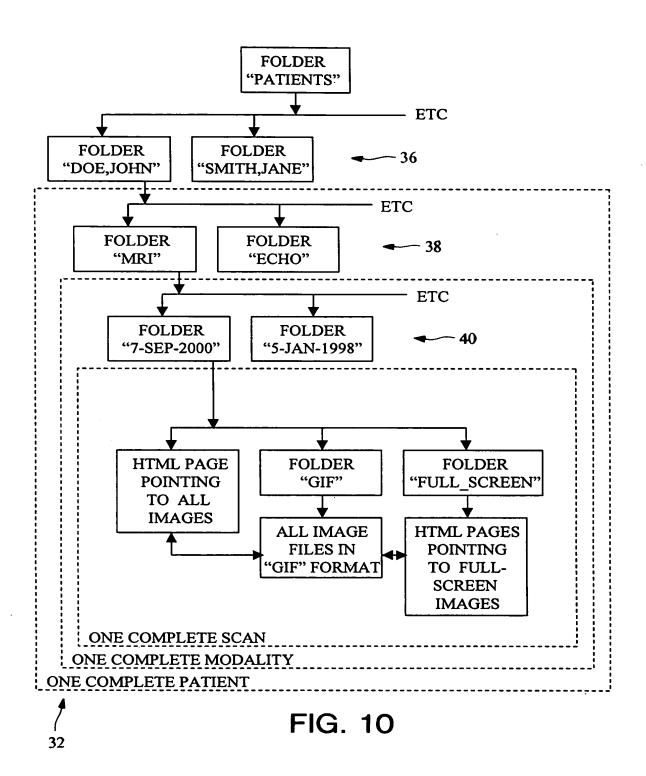
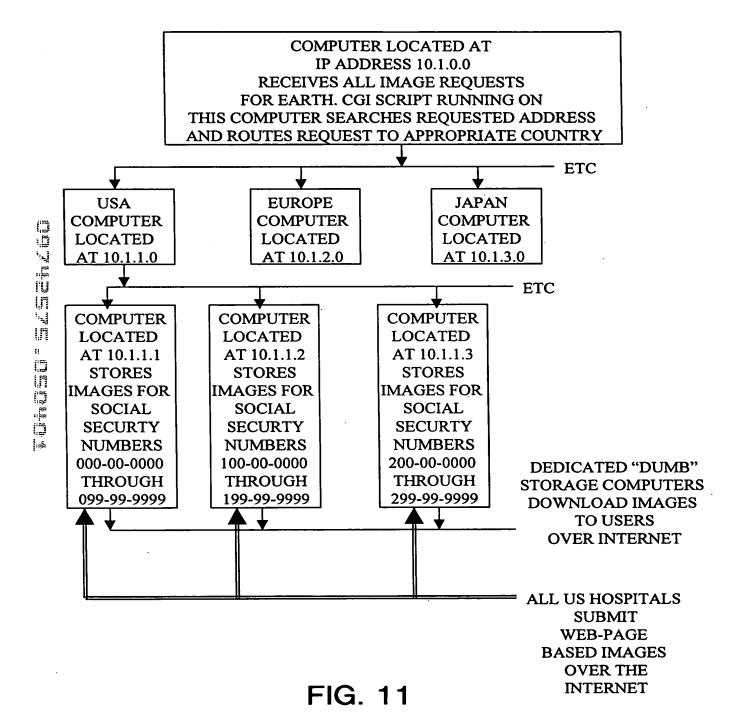


FIG. 9





7010

USER REQUESTS TO VIEW IMAGES AT

"http://www.imagedatabase.com/usa/123456789/mri/23sep2027"

7020

COMPUTER LOCATED AT "www.imagedatabase.com" (IP ADDRESS 10.1.0.0) SEARCHES FIELD, FINDS "usa", AND TELLS USER'S BROWSER TO FORWARD THE REQUEST TO COMPUTER LOCATED AT IP ADDRESS 10.1.1.0

7030

COMPUTER LOCATED AT IP ADDRESS 10.1.1.0 SEARCHES FIELD, FINDS "123456789", AND TELLS USER'S BROWSER TO FORWARD THE REQUEST TO COMPUTER LOCATED AT IP ADDRESS 10.1.1.2

7040

COMPUTER LOCATED AT IP ADDRESS 10.1.1.2 RETURNS THE REQUESTED IMAGE DATA DIRECTLY TO USER

FIG. 12

FIG. 13

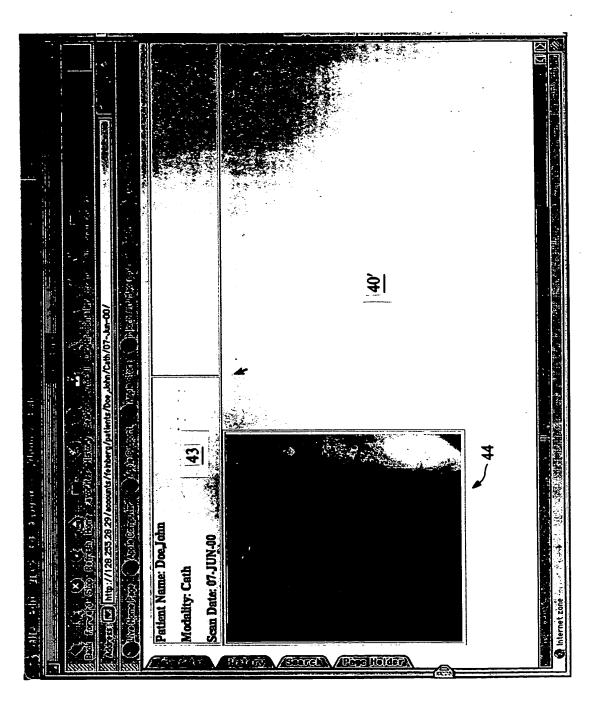
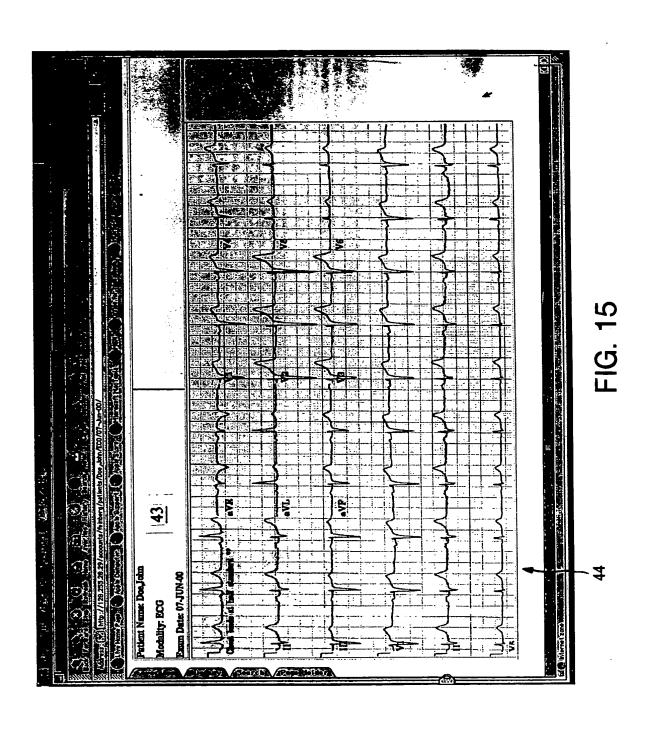


FIG. 14



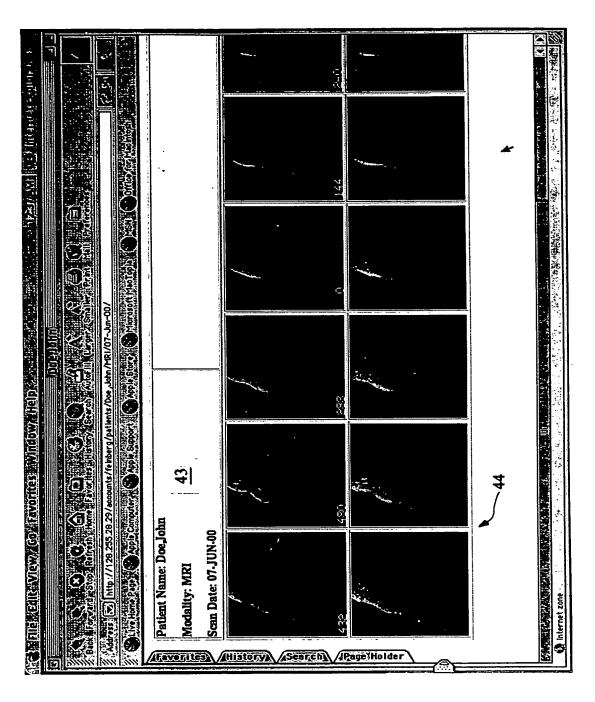


FIG. 16

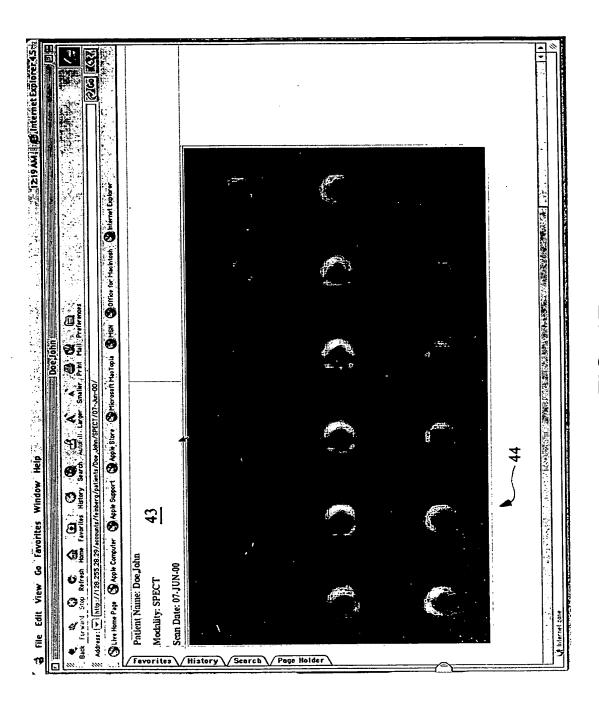


FIG. 17

